

'E<sub>u</sub>

'E<sub>u</sub>

2021


$$2 \quad \begin{array}{ccccccc} \text{E}_n & \text{H}_\Psi \text{ à } & \text{H}_\Psi \text{ ũ } & \text{H} \text{ à } & \text{H} \text{ à } & & \text{à } & \text{à } \\ \text{b} & & \text{à} & & & & \hat{A} & \end{array}$$
$$3 \quad \mathbb{E}_{\mathbf{u}} \quad \mathbb{H} \mathbb{F} \quad \mathbb{H} \Psi \Psi \quad \hat{A}$$
$$4 \quad \Psi \quad H^+ \quad \hat{\quad} \quad P \sim \Psi \quad E_n \quad F \quad i \quad \hat{A}$$

5  $\mathcal{H} \Psi =$   $N_0$   $\mathcal{E}$

$\hat{e}$   $\hat{u}$   $\mathcal{L}$   $\mathcal{A}$   $\tilde{\mathcal{I}}$   $\tilde{\mathcal{H}}$   $\mathcal{E}_{\mathcal{L}}$   $\hat{u}$   $N_0$   $\hat{a}$

$\mathcal{E}$   $\Psi =$   $\Psi =$

$\hat{u}$   $\hat{A}$   $\mathcal{H}$   $\mathcal{L}$   $\mathcal{E}_{\mathcal{L}}$   $\hat{u}$   $\hat{A}\mathcal{L}$   $\mathcal{E}_{\mathcal{L}}$   $\mathcal{E}$   $\hat{u}$

$N_0$   $\mathcal{H}$   $\Psi \mathcal{L}$   $\mathcal{E}$   $\hat{u}$   $\mathcal{E}_{\mathcal{L}}$   $\mathcal{E}$   $\hat{u}$   $\hat{A}$

$\mathcal{E}_{\mathcal{L}}$   $\mathcal{E}_{\mathcal{L}}$   $\mathcal{L}$   $\mathcal{E}_{\mathcal{L}}$   $N_0$   $\tilde{\mathcal{I}}$   $\sim \hat{a}\hat{e}$   $\mathcal{E}_{\mathcal{L}}$   $\tilde{\mathcal{I}}$   $\mathcal{H}$

$\mathcal{E}_{\mathcal{L}}$   $\hat{u}$   $\hat{u}$   $\mathcal{H}$   $\mathcal{E}_{\mathcal{L}}$   $\mathcal{E}$   $\hat{u}$   $\mathcal{I}$

$\mathcal{E}_{\mathcal{L}}$   $\hat{u}$   $\hat{u}$   $\mathcal{E}_{\mathcal{L}}$   $\mathcal{L}$   $N_0$   $\hat{u}$   $\mathcal{L}$   $\mathcal{E}$

$\hat{u}$   $N_0$   $\hat{A}$

$\mathcal{E}_{\mathcal{L}}$   $\mathcal{H}$   $\mathcal{H} \Psi$   $\Psi$   $\hat{e}$   $\mathcal{H}$   $\mathcal{E}_{\mathcal{L}}$   $N_0$   $\tilde{\mathcal{I}}$

$\mathcal{L}$   $N_0$   $\hat{u}$   $\mathcal{L}$   $\mathcal{E}$   $\hat{u}$   $N_0$

$\Psi$   $\hat{A}$

1 'E<sub>n</sub>

|                 |                                                                                    |  |  |   |
|-----------------|------------------------------------------------------------------------------------|--|--|---|
| E <sub>en</sub> |                                                                                    |  |  |   |
|                 | $\begin{matrix} \times & \times & \times \\ \times & \times & \times \end{matrix}$ |  |  | 1 |
|                 | $\begin{matrix} \times & \times & \times \\ \times & \times & \times \end{matrix}$ |  |  | 1 |

|  |                   |               |
|--|-------------------|---------------|
|  | $\mathbb{H}_\Psi$ | $\mathbb{H}'$ |
|  |                   |               |



$$\begin{array}{c}
\hat{A} \\
\sim \mathbf{H} \sim \\
\gamma \quad \check{0} \quad \mathfrak{b} \quad \mathfrak{c} \quad 0 \quad \check{0} \quad \mathbf{H} \quad \tau \quad \grave{a} \\
\mathfrak{z} \quad \mathfrak{b} \quad \mathfrak{z} \quad \mathfrak{c} \quad 1 \quad 1 \quad \acute{c} \quad \check{0} \quad 0 \quad \grave{a} \\
\mathfrak{z} \quad \acute{c} \quad \hat{A} \\
\hat{\mathfrak{z}} \hat{\mathfrak{z}} \hat{\mathfrak{z}} \sim \mathbf{E}_n \quad \beta \\
\check{0} \quad \grave{a} \quad \grave{a} \quad \Leftrightarrow \quad \gamma \quad \check{0} \\
\grave{a} \quad 1 \quad \grave{a} \quad \grave{a} \quad \mathfrak{c} \quad \mathbf{H} \quad \hat{A} \mathbf{E}_n \\
\leftrightarrow \quad \grave{a} \quad 1 \quad \grave{a} \quad \gamma \\
\grave{a} \quad \gamma \quad \check{0} \quad \hat{A} \quad \mathbf{E}_n \quad \mathbf{N}_0 \quad \check{0} \quad \pi \quad \mathbf{H} \quad \check{0} \quad \grave{a} \\
\Rightarrow \quad \mathfrak{b} \quad \mathbf{E}_n \quad \gamma \quad \check{0} \quad \check{0} \\
\hat{A} \mathbf{E}_n \quad \mathbf{H} \quad , \\
\gamma \quad \acute{c} \quad \mathbf{E} \quad \gamma \quad \mathbf{L} \quad \mathfrak{l} \quad \gamma \quad \gamma' \\
\mathfrak{M} \quad \Psi \quad \mathbf{H} \quad \mathbf{H} \quad \Psi, \mathfrak{z} \quad \mathbf{E} \quad \hat{A} \\
\mathbf{E}_n \quad \mathfrak{l} \quad \mathbf{L} \quad \mathbf{E}_n \quad \mathbf{H} \quad \mathfrak{l} \quad \mathbf{F} \quad \mathbf{L} \\
\gamma \quad \mathfrak{l} \quad \mathbf{L} \quad \mathfrak{z}, \mathfrak{z} \quad \mathbf{E}_n \quad \acute{c} \quad \Psi \quad \gamma \quad \gamma \\
\mathbf{H} \quad \mathfrak{F} \quad \hat{A} \\
\hat{\mathfrak{z}} \quad \sim \quad \mathbf{N}_0 \\
\grave{a} \\
0 \quad \tau \quad \grave{a} \quad \check{0} \quad \grave{a} \quad \pi \quad \grave{a} \quad 1 \quad \grave{a} \\
\gamma \quad \tau \quad \mathfrak{F} \quad \mathfrak{c} \quad \hat{A} \quad \mathfrak{z} \quad \check{0} \quad \acute{c} \quad \tau \quad \mathfrak{z} \quad \check{0} \\
\check{0} \quad \check{0} \quad \mathfrak{l} \quad \mathfrak{F} \quad \check{0} \quad \mathfrak{z} \\
\check{0} \\
\hat{\mathfrak{z}} \quad \sim \quad \mathbf{F} \quad \tau \quad \hat{A} \quad \grave{a} \quad \mathfrak{l} \quad \uparrow \quad \grave{a} \\
\mathfrak{z} \quad \mathbf{E} \quad \hat{\mathfrak{z}} \quad \check{0} \quad \mathfrak{b} \quad \hat{A} \\
\check{0} \quad \acute{c} \quad \hat{\mathfrak{z}} \quad \mathbf{E} \quad \mathfrak{l} \quad \grave{a} \quad \acute{c} \quad \tau \quad \mathbf{H} \quad \mathfrak{z}, \mathfrak{z} \\
\mathfrak{z} \quad \mathfrak{l} \quad \mathbf{E} \quad \acute{c} \quad 1 \\
\tau \quad \mathfrak{l} \quad \uparrow \quad \sim \quad \mathfrak{l} \quad \mathfrak{l} \quad \mathfrak{D} \quad 1 \quad \Psi \\
\check{0} \quad \mathfrak{H} \quad \check{0} \\
\grave{a} \\
\mathfrak{z} \quad \mathfrak{z} \quad \mathbf{E} \quad \mathfrak{l} \quad \mathfrak{z} \quad \check{0} \quad \acute{c} \quad \tau \quad \mathfrak{z} \quad \gamma \quad \check{0} \quad \mathfrak{l} \\
\mathfrak{F} \quad \gamma \quad \check{0} \quad \gamma \quad \grave{a} \quad \mathfrak{M} \quad \check{0} \quad \hat{A} \quad \pi \quad 1 \quad \grave{a} \quad \mathbf{N}_0 \\
\pi \quad \mathbf{Y} \quad \acute{c} \quad \check{0} \quad \hat{A} \acute{c} \quad \mathfrak{l} \quad \grave{a} \quad \grave{a} \quad \grave{a} \quad \check{0} \\
\mathfrak{F} \quad \mathfrak{z} \quad \gamma \quad \mathfrak{c} \quad \gamma \quad \check{0} \\
\hat{A} \\
\mathfrak{z} \quad \mathfrak{z} \quad \Psi \quad \acute{c} \quad \mathfrak{l} \quad \mathfrak{F} \quad \mathfrak{z}, \mathfrak{z} \quad \mathbf{P} \\
\mathfrak{z} \quad \hat{A} \quad \gamma \quad \gamma \quad \mathfrak{l} \quad \check{0} \quad \hat{A} \\
\gamma \quad \beta \quad \hat{A} \\
\mathfrak{z} \quad \mathfrak{z} \quad \mathbf{E} \quad \mathfrak{l} \quad \acute{c} \quad \tau \quad \mathfrak{z} \quad \check{0} \quad 1 \quad \gamma \quad \mathfrak{z} \\
\mathfrak{l} \quad \mathbf{P} \quad \mathfrak{z} \quad \gamma \quad \mathfrak{l} \quad \check{0} \quad \gamma \quad \mathfrak{l} \quad \check{0} \quad \hat{A} \\
\gamma \quad \grave{a} \quad \gamma \quad \check{0} \quad \acute{c} \quad \tau \quad \gamma \quad \gamma \quad \Leftrightarrow
\end{array}$$

$\tilde{u}$   $\tilde{I}$   $\mathbb{F}$   $\gamma$   $\gamma$   $\Leftrightarrow$   $\tilde{u}$   $\tilde{z}$   $\gamma$   $\gamma$   
 $\tilde{a}$   $\tilde{u}$   $\tilde{a}$   $\gamma$   $\tilde{I}$   $\hat{A}$   $\mathbb{F}$   $\gamma$   $\gamma$   $\tilde{I}$   
 $\gamma$   $\gamma$   $\hat{A}$   
 $\tilde{Y}$   $\mathbb{E}_n$   $\mathbb{C}$   $\tilde{a}$   
 $\mathbb{H}$   $\tilde{u}$   $\tilde{a}$   $\tilde{u}$   $\tilde{a}$   $\mathbb{L}$   $\hat{\mathbb{C}}$   $\tilde{u}$   $\tilde{a}$   $\mathbb{H}$   
 $\tilde{u}$   $\tilde{a}$   $\tilde{u}$   $\tilde{I}$   $\mathbb{V}$   $\mathbb{E}_n$   $\tilde{a}$   $\tilde{u}$   $\hat{A}$   
 $\tilde{a}$   $\tilde{Y}$   $\mathbb{L}$   
 $\gamma$   $\hat{A}$   $\tilde{a}$   $\tilde{z}$   $\hat{A}$   $\mathbb{E}_n$   $\mathbb{E}$   $\mathbb{L}$   $\pi$   
 $\pi$   $\hat{\mathbb{C}}$   $\tilde{a}$   $\gamma$   $\sim$   $\mathbb{E}_n$   $\tilde{z}^+$   
 $\tilde{z}$   $\tilde{u}$   $\mathbb{F}$   $\gamma$   $\tilde{e}$   $\gamma$   $\mathbb{L}$   $\hat{A}$   $\hat{A}$   $\mathbb{I}$   $\mathbb{F}$   $\tilde{z}$   
 $\hat{A}$   $\gamma$   $\mathbb{L}$   $\mathbb{F}$   $\gamma$   $\mathbb{N}_0$   $\tilde{u}$   $\hat{A}$   
 $\pi$   $\pi$   $\mathbb{E}$   
 $\mathbb{E}_n$   
 $\tilde{a}$   $\pi$   $\mathbb{L}$   $\hat{A}$   $\mathbb{E}_n$   $\tilde{u}$   $\tilde{z}^+$   
 $\Leftrightarrow$   $\tilde{u}$   $\tilde{I}$   $\tilde{u}$   $\mathbb{H}$   $\tilde{u}$   $\tilde{a}$   $\mathbb{I}$   
 $\tilde{a}$   $\tilde{I}$   $\tilde{a}$   $\gamma$   $\tilde{a}$   $\gamma$   
 $\mathbb{N}_0$   $\hat{A}$   
 $\hat{\mathbb{C}}$   $\sim$   $\mathbb{E}_n$   $\mathbb{H}$   $\mathbb{H}$   $\tilde{I}$   
 $\mathbb{E}_n$   $\mathbb{F}$   $\tilde{u}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\mathbb{I}$   
 $\mathbb{C}$   $\mathbb{H}$   $\mathbb{L}$   $\hat{A}$   $\mathbb{E}_n$   $\tilde{u}$   $\mathbb{E}_n$   $\tilde{a}$   $\tilde{a}$   
 $\mathbb{I}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\mathbb{H}$   $\tilde{a}$   
 $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   $\tilde{a}$   
 $\tilde{a}$   $\tilde{a}$   $\hat{A}$   $\mathbb{E}_n$   $\tilde{I}$   
 $\gamma$   $\hat{A}$   
 $\mathbf{1}$   $\tilde{a}$   $\tilde{I}$   
 $\mathbb{E}_n$   $\hat{\mathbb{C}}$   $\mathbb{C}$   $\sim$   
 $\mathbb{I}$   $\mathbb{L}$   $\tilde{a}$   $\hat{\mathbb{C}}$   $\mathbb{E}_n$   $\tilde{a}$   $\tilde{a}$   $\tilde{u}$   $\hat{\mathbb{C}}$   $\mathbb{C}$   
 $\tilde{a}$   $\mathbb{I}$   $\tilde{a}$   $\tilde{a}$   $\tilde{u}$   $\mathbb{C}$   
 $\Leftrightarrow$   $\hat{A}$   
 $\mathbf{2}$   $\tilde{a}$   $\tilde{I}$   
 $\mathbb{E}_n$   $\mathbb{E}_n$   $\gamma$   $\gamma$   $\mathbb{E}_n$   $\mathbb{L}$   $\tilde{a}$   $\tilde{I}$   
 $\hat{A}$   $\mathbb{E}_n$   $\mathbb{H}$   $\tilde{a}$   $\tilde{I}$   
 $\mathbb{C}$   $\mathbb{H}$   $\mathbb{C}$   $\tilde{I}$   $\hat{A}$

i

3.2      N<sub>0</sub>      h    ψ

γ β e

|                                                                                                                      |     |                    |                                                                                               |     |
|----------------------------------------------------------------------------------------------------------------------|-----|--------------------|-----------------------------------------------------------------------------------------------|-----|
|                                                                                                                      | ^ ~ | ^ H <sub>0</sub> ~ | ^ $\begin{smallmatrix} \gamma & \gamma & \gamma \\ \beta & \beta & \beta \end{smallmatrix}$ ~ | ^ ~ |
|                                                                                                                      |     |                    |                                                                                               |     |
| $\begin{smallmatrix} \gamma & \gamma & \gamma \\ \beta & \beta & \beta \end{smallmatrix}$ E <sub>ν<sub>1</sub></sub> |     |                    |                                                                                               |     |
| $\begin{smallmatrix} \gamma & \gamma & \gamma \\ \beta & \beta & \beta \end{smallmatrix}$ E <sub>ν<sub>2</sub></sub> |     |                    |                                                                                               |     |
| u                                                                                                                    |     |                    |                                                                                               |     |

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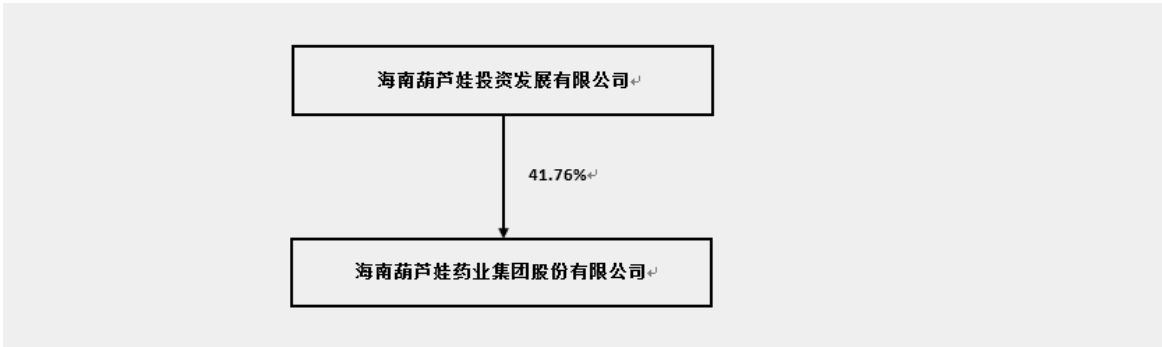




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|                                        |  |  |  |  |  |  |  |

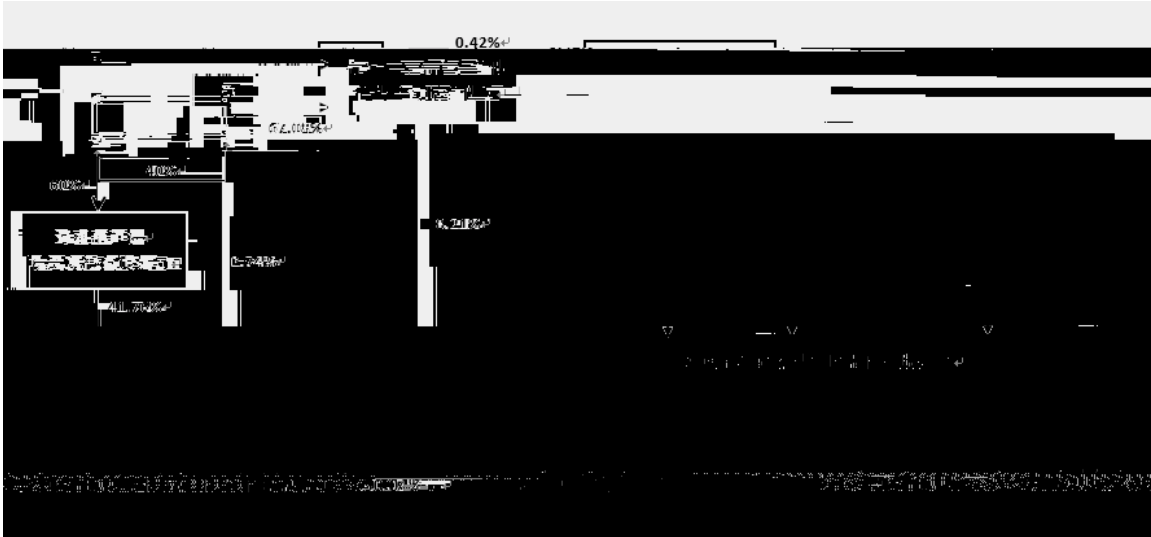
4.2
E<sub>н</sub>
б

☒
☐



4.3
E<sub>н</sub>
б

☒
☐



4.4
E<sub>н</sub>
п

☐
☒

5
E<sub>н</sub>

☐
☒

